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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,336	01/02/2004	John D. Doggett	50037.214US01	7612
27488 7590 01/06/2009 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER				
ANYA, CHARLES E				
ART UNIT		PAPER NUMBER		
2194				
MAIL DATE		DELIVERY MODE		
01/06/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/751,336

Applicant(s)

DOGGETT, JOHN D.

Examiner

Charles E. Anya

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 8/31/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are pending in this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 10-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**
3. Claim 10 is directed to non-statutory subject matter because the claimed "computer-readable medium" is not limited to storage medium. According to Applicant's disclosure, page 4 lines 1-10, the computer readable medium is not limited storage medium, instead it is defined to include both storage media (e.g. floppy disk, a hard disk drive, a RAM, CD-ROMs, DVD-ROMs) and communication media (e.g. wired media, infrared, signal bearing media, transmission-type media), as such the claim(s) are directed to non-statutory subject matter.

To overcome this rejection the claim(s) need to be amended to include only storage media and not transmission media.

4. Claim 17 is directed to a "system". The body/structure of the claim indicates the "computer system" include "hooking into windows", "setting timers" and "determining steps" all of which are software per se. A system comprising "hooking into windows", "setting timers" and "determining steps" is therefore not a process, a machine, a manufacture or a composition of matter and as such not directed to statutory subject matter.

In contrast, a claimed "computer storage medium encoded with instructions that when executed by a processor provides:" is a computer element with defined structural and functional interrelationships. The structural and functional interrelationship allows the claim to be classified as a machine, the functionality realized and thus statutory.

Accordingly, appropriate correction or amendment is required (NOTE: computer storage medium must be directed to storage medium **only** and not transmission medium or carrier wave).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-5, 7-10, 12-19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0191865 A1 to De Armas et al. in view of U.S. Pat. No. 7,047,533 B2 issued to Circenis.

6. As to claim 1, De Armas teaches a computer-implemented method for user interface automation synchronization, comprising:

sub-classing selected windows displayed on the user interface, wherein each of the selected windows corresponds to a message-queue of a thread ("...sub-classing process..." page 3 paragraph 0035, page 4 paragraph 0048);

De Armas silent with reference to setting timers corresponding to each of the selected windows; determining whether a particular timer associate with one of the selected windows has fired; and determining whether the message-queues of the threads are empty, such that when the message-queues are empty, the user interface automation proceeds to a next action.

Circenis teaches setting timers corresponding to each of the selected windows ("...wait utility...specify a time estimate (timeout)..." Col. 2 Ln. 18 – 25, Col. 4 Ln. 56 – 59); determining whether a particular timer associate with one of the selected windows has fired ("...wait utility...specify a time estimate (timeout)..." Col. 2 Ln. 32 – 42, Col. 4 Ln. 56 – 59, Timeout Manager 170 Col. 5 Ln. 59 – 63); and determining whether the message-queues of the threads are empty, such that when the message-queues are empty, the user interface automation proceeds to a next action ("...wait utility...waiting

for completion..." Col. 1 Ln. 64 - 67, "...mandatory...waiting..." Col. 2 Ln. 1 - 8, Col. 4 Ln. 34 - 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of De Armas with the teaching of Circenis because the teaching of Circenis would improve the system of De Armas by providing a generic wait utility for tracking of event executions including flexible or optimal waiting functions (Circenis Col. 1 Ln. 41 - 49).

As to claim 3, Circenis teaches the computer-implemented method of claim 1, further comprising calling a wait application program interface to determine whether the message-queues of the threads are empty ("...wait utility...waiting for completion..." Col. 1 Ln. 64 - 67, "...mandatory...waiting..." Col. 2 Ln. 1 - 8).

7. As to claim 4, Circenis teaches the computer-implemented method of claim 3, wherein message-queues of the threads are indicated as empty when the user interface automation is waiting on the call to the wait application program interface ("...wait utility...waiting for completion..." Col. 1 Ln. 64 - 67, "...mandatory...waiting..." Col. 2 Ln. 1 - 8).

8. As to claim 5, De Armas teaches the computer-implemented method of claim 1, wherein sub-classing a selected window corresponds to replacing window procedure

code corresponding to the selected window with user interface automation code (“...insert injection DLL 134...” page 4 paragraph 0045).

9. As to claim 7, Circenis teaches the computer-implemented method of claim 1, wherein a determination that a particular timer associated with one of the selected windows has fired indicates that a message-queue corresponding to the one of the selected windows is empty (“...wait utility...waiting for completion...” Col. 1 Ln. 64 - 67, “...mandatory...waiting...” Col. 2 Ln. 1 – 8, Col. 4 Ln. 34 – 46).

10. As to claim 8, Circenis teaches the computer-implemented method of claim 1, further comprising setting timers corresponding to system activities (Timeout Manager 170 Col. 5 Ln. 59 – 63).

11. As to claim 9, Circenis teaches the computer-implemented method of claim 8, further comprising additionally determining whether the message-queues of threads corresponding to the system activities are empty before the user interface automation proceeds to a next action (“...wait utility...waiting for completion...” Col. 1 Ln. 64 - 67, “...mandatory...waiting...” Col. 2 Ln. 1 – 8).

12. As to claims 10 and 17, see the rejection of claim 1 above.

13. As to claim 12, see the rejection of claim 5 above.

14. As to claim 13, De Armas teaches the computer-readable medium of claim 10, wherein hooking selected windows further comprises attaching a dynamic link library to window procedure code corresponding to the selected window ("...insert injection DLL 134..." page 4 paragraph 0045).

15. As to claims 14 and 18, see the rejection of claim 3 above.

16. As to claims 15 and 19, see the rejection of claim 4 above.

17. As to claim 16, see the rejection of claim 7 above.

18. As to claims 21 and 22, see the rejection of claims 8 and 9 respectively.

19. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0191865 A1 to De Armas et al. in view of U.S. Pat. No. 7,047,533 B2 issued to Circenis as applied to claims 1 or 10 above, and further in view of U.S. Pat. No. 5,835,763 issued to Klein.

20. As to claim 2, De Armas and Circenis are silent with reference to the computer-implemented method of claim 1, further comprising calling a synchronization application program interface to initiate sub-classing of the selected windows.

Gebhart teaches the computer-implemented method of claim 1, further comprising calling a synchronization application program interface to initiate subclassing of the selected windows (Synchronization 630 Col. 7 Ln. 59 – 67, Col. 8 Ln. 13 – 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Circenis and De Armas with the teaching of Gebhart because the teaching of Gebhart would improve the system of Circenis and De Armas by providing a process synchronization that allows multiple processes to join up or handshake at a certain point, so as to reach an agreement or commit to a certain sequence of action.

21. As to claim 11, see the rejection of claim 2 above.

22. Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0191865 A1 to de Armas et al. in view of U.S. Pat. No. 7,047,533 B2 issued to Circenis as applied to claims 1 or 17 above, and further in view of U.S. Pat. No. 5,835,763 issued to Klein.

23. As to claim 6, De Armas and Circenis are silent with reference to the computer-implemented method of claim 1, wherein the timers corresponding to each of the selected windows are set to zero.

Klein teaches the computer-implemented method of claim 1, wherein the timers corresponding to each of the selected windows are set to zero ("...zero WaitTime..." Col. 12 Ln. 48 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Circenis and De Armas with the teaching of Klein because the teaching of Klein would improve the system of Circenis and De Armas by providing a notification system for delivering a message to a set of recipients.

24. As to claim 20, see the rejection of claim 6 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pub. No. 2002/0046230 A1 to Dieterich et al.: directed to a process for scheduling thread of execution on a limited number of operating system thread.

U.S. Pub. No. 2005/0081206 A1 to Armstrong et al.: directed to a process for profiling threaded programs.

U.S. Pat. No. 7,210,105 b2 issued to Melamed et al.: directed to a system for synchronizing software execution.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is 571-272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cea.

/Li B. Zhen/
Primary Examiner, Art Unit 2194